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INTERAKSI PEMASARAN MINYAK KELAPA DAN KELAPA SAWIT

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ABSTRAK

Hasil penelitian menunjukkan bahwa daya saing minyak kelapa semakin lemah terhadap minyak sawit pada pasar domestik maupun pasar ekspor. Tekanan persaingan dari minyak sawit akan lebih dirasakan oleh petani yang mengandalkan pendapatannya dari kelapa, yaitu 64% petani kelapa Asahan dan 69% petani kelapa Indragiri Hilir. Untuk meningkatkan daya saing kelapa perlu diversifikasi kearah produk olahan kelapa yang spesifik dan merupakan keunggulan dari kelapa, peningkatan produktivitas tanaman serta lahan perkebunan kelapa dengan tanaman tumpangsari yang sesuai.

Kata kunci : *Elaeis guineensis* Jacq., *Cocos nucifera* L., pemasaran

PENDAHULUAN

Indonesia merupakan negara produsen kelapa sawit dan kelapa terbesar kedua dunia. Kompisisi kimia minyak kelapa berbeda dengan minyak kelapa sawit tetapi mirip dengan minyak inti sawit, sehingga mempunyai kegunaan spesifik yang berbeda pula. Kandungan minyak kelapa lebih dominan asam laurat, sedangkan minyak sawit lebih dominan asam oleat dan palmitat.

Sampai pertengahan dekade 1970-an, sumber utama minyak/lemak nabati dalam negeri adalah minyak kelapa sedang produk minyak sawit untuk ekspor. Dalam periode 1969 - 1982, konsumsi meningkat lebih dari dua kali lipat, dari 3.8 kg/kapita/tahun menjadi 7.8 kg kapita tahun. Sementara produksi kelapa hanya meningkat dengan laju pertumbuhan 2.5% tahun dalam kurun waktu yang sama (7), sehingga minyak kelapa tidak lagi memenuhi kebutuhan pasar domestik

Untuk mencukupi kebutuhan pasar domestik, pemerintah pengeluarkan kebijakan untuk mengalokasikan sebagian minyak sawit ke pasar dalam negeri. Jumlah serta harga alokasi diatur menurut ketentuan SKB tiga menteri yang dikeluarkan pada tahun 1978. Mulai saat itu, kelapa sawit dan kelapa berbagi pasar yang sama pada pasar domestik.

Bagi Indonesia, kedua komoditi samasama mempunyai arti penting, baik sebagai sumber devisa negara, sumber penghasilan masyarakat maupun bagi konsumen. Mengingat produktivitas kelapa sedang rendah sedangkan produksi minyak sawit yang tinggi, maka minat terhadap kelapa sawit lebih tinggi.

Dilain pihak tanaman kelapa rakyat merupakan tanaman yang tidak banyak menyita waktu petani sehingga membuka kesempatan petani untuk melakukan usaha lain. Oleh karena itu kelangsungan kebun kelapa sangat tergantung pada besarnya ketergantungan kehidupan petani pada tanaman tersebut. Makin besar ketergantungannya makin besar pula keinginan petani untuk meningkatkan produktivitas lahannya.

Penelitian ini mengkaji interaksi dan ketahanan pemasaran minyak kelapa terhadap minyak sawit.

BAHAN DAN METODE

Data yang digunakan berasal dari berbagai sumber terutama Biro Pusat Statistik, Direktorat Jenderal Perkebunan dan Kantor Pemasaran Bersama. Analisis yang digunakan adalah deskriptif statistik, analisis regresi, dan analisis biaya.

Untuk mengetahui pengaruh persaingan minyak kelapa sawit dengan minyak kelapa terhadap produsen kelapa dan ketegaran petani kelapa terhadap tekanan persaingan dari komoditi kelapa sawit, dilaksanakan pula survei di daerah sentra produksi kelapa di Sumatera Utara dan Riau. Masing-masing propinsi ditetapkan dua kabupaten sentra produksi kelapa dan dari tiap kabupaten terpilih ditetapkan secara purposif kecamatan yang merupakan penghasil utama kelapa, kemudian dari tiap kecamatan ditetapkan beberapa desa masing-masing dengan 10-20 petani responden.

Data yang dikumpulkan terdiri dari data sekunder dari Dinas Perkebunan Tingkat II dan data primer langsung dari petani. Data luas areal, produksi dan jumlah keluarga petani kelapa dikumpulkan dari Dinas Perkebunan, sedang data tentang luas pemilikan, kultur teknis, produksi, pendapatan dari kelapa dan usaha lain serta data pendukung lainnya dikumpulkan dari petani.

Ketegaran petani sebagai produsen kelapa diukur berdasarkan kontribusi kelapa terhadap penghasilan petani. Makin besar kontribusi kelapa terhadap pendapatan petani, makin besar pengaruh tekanan minyak kelapa sawit terhadap penghasilan petani sehingga makin besar pula kemungkinan petani tersebut mengalihkan usahanya.

HASIL DAN PEMBAHASAN

1. Perkembangan areal dan produksi

Perkembangan produksi kelapa sawit sangat cepat dengan laju pertumbuhan rata-rata 14,64%/tahun. Sebaliknya laju pertumbuhan produksi kelapa lambat, rata-rata hanya 3,64%/tahun dalam sepuluh tahun terakhir.

Untuk mempercepat peningkatan produksi kelapa dilaksanakan berbagai proyek pengembangan antara lain, PIR-SUS, SCDP, PRPTE, P2DT dan P2WK. Namun produktivitas perkebunan kelapa masih rendah yaitu rata-rata hanya 1 ton setara kopra/ha (7), sementara pada kelapa sawit mencapai rata-rata 3 ton/ha minyak sawit mentah dan belum termasuk minyak inti (8).

2. Penyerapan pasar

Sejalan dengan pertambahan penduduk dan peningkatan pendapatan, konsumsi minyak goreng nasional meningkat secara mantap dari 768,4 ribu ton pada tahun 1980 menjadi sekitar 1,23 juta ton pada tahun 1991, dengan laju pertumbuhan rata-rata 43.000 ton/tahun atau sekitar 0,23 kg/kapita/tahun.

Analisis regresi sederhana menunjukkan bahwa variasi konsumsi minyak goreng dapat ditentukan oleh minyak kelapa dan minyak sawit dengan persamaan regresi sebagai terlihat pada Persamaan 1. Hal tersebut menunjukkan bahwa konsumsi minyak goreng lokal menjadi faktor pembatas kedua minyak tersebut dan pemanfaatan minyak kelapa serta minyak kelapa sawit untuk keperluan lain belum begitu berarti.

$Y = 357{,}96 + 0{,}4834\ MS + 0{,}4281\ MK$ 1

$R^2 = 0{,}98$

Y = konsumsi minyak goreng nasional

MS = minyak sawit

MK = minyak kelapa

Peran minyak kelapa sawit semakin dominan dalam konsumsi minyak goreng masyarakat Indonesia dan mendekati substitusi yang semakin sempurna dari minyak kelapa. Kalau pada periode 1969-1971, komposisi minyak kelapa pabrik mencapai 91,7%, maka pada tahun 1982 komposisi minyak kelapa turun menjadi 59,67% dan dari minyak kelapa sawit 50,3% (5). Penurunan peran minyak kelapa terus berlanjut. Walaupun produksi minyak goreng dari kelapa meningkat, namun peningkatannya lebih rendah dari peningkatan produksi minyak goreng dari kelapa sawit. Total produksi minyak kelapa dan sawit pada periode 1989-1993, terjadi peningkatan peran produksi minyak sawit atau penurunan peran minyak kelapa 11,05%, sehingga pada tahun 1993 peran produksi minyak goreng kelapa tinggal 28,94% dari total peran produksi minyak goreng kelapa dan kelapa sawit (4).

3. Perkembangan harga

Harga minyak goreng asal minyak kelapa di pasar ekspor ternyata 14% lebih tinggi dibandingkan minyak goreng asal CPO, sedangkan di pasar domestik harga minyak goreng asal kelapa lebih tinggi 17% (1984-1993). Oleh karena itu, kelebihan tersebut merupakan rata-rata kelebihan apresiasi terhadap minyak kelapa.

Perkembangan harga minyak goreng menurut bahan bakunya di pasar domestik dan pasar ekspor disajikan pada Tabel 2.

Tabel 1. Produksi minyak goreng kelapa dan kelapa sawit Indonesia 1989 - 1993 (ton)
Table 1. The Indonesia production of frying oil from coconut and palm oil in 1989 - 1993 (ton)

Asal minyak goreng *Frying oil origin*	1989	1990	1991	1992	1993
Sawit *Palm oil*	687,911	1,140,126	1,177,564	1,221,723	1,268,759
Kelapa *Coconut oil*	458,395	488,549	494,495	507,253	516,623
Jumlah *Total*	1,146,306	1,628,675	1,672,059	1,728,976	1,785,382
% Sawit *% Palm oil*	60.01	70.00	70.43	70.66	71.06
% Kelapa *% Coconut oil*	39.99	30.00	29.57	29.34	28.94

Sumber : Capricorn
Source

Tabel 2. Harga minyak goreng menurut bahan bakunya di pasar domestik dan pasar ekspor
Table 2. Frying oil price based on its raw material in domestic and export market

Tahun Year	Domestik (Rp/kg) *Domestic*		Cif Rotterdam (US$/ton)	
	Asal CPO *CPO origin*	Asal CNO *CNO origin*	Asal CPO *CPO origin*	Asal CNO *CNO origin*
1985	669	698	543	591
1986	599	641	324	303
1987	716	824	390	413
1988	855	1,040	471	565
1989	831	1,037	375	517
1990	690	765	332	336
1991	816	937	388	432
1992	1,012	1,315	450	577
1993	949	1,082	437	510

Sumber : Kantor Pemasaran Bersama PT. Perkebunan (2)
Source : Joint Marketing Office Gov. Owned Estate

4. Kompetisi

4.1. Perbandingan harga pokok

Olein merupakan fraksi yang setara dengan minyak kelapa sebagai bahan baku dalam industri minyak goreng. Dalam rafinasi dan fraksinasi CPO, rendemen untuk olein adalah sekitar 73%, stearin 23% dan asam lemak 3%. Berdasarkan data harga domestik tahun 1985-1992, perbandingan harga olein, stearin dan asam lemak adalah 42,4 : 32,9 : 24,7. Oleh karena itu, nilai produk pengolahan CPO adalah setara dengan 81,03% olein. Dengan demikian, biaya produksi minyak kelapa untuk dapat bersaing dengan minyak sawit dapat dirumuskan sebagai berikut :

$$\begin{aligned} ComCost\_CNO &= 1{,}17 * (Cost\_olein) \\ &= 1{,}17 * (Cost\_CPO + Cost\_rf)/0{,}8103 \\ &= 1{,}44 * (Cost\_CPO + Cost\_rf) \quad \ldots\ldots 2 \end{aligned}$$

ComCost_CNO = biaya produksi minyak kelapa untuk dapat bersaing
Cost_olein = biaya produksi olein
Cost_CPO = biaya produksi/kg CPO
Cost_rf = biaya produksi/kg CPO pada industri rafinasi dan fraksinasi

Jika harga yang terbentuk di atas harga bersaing, maka hal tersebut menunjukkan bahwa minyak kelapa berada pada posisi yang relatif lebih baik dibandingkan dengan minyak sawit dalam perdagangan. Namun, hal tersebut tidak selalu sejalan dengan kemampuan usaha untuk menghasilkan keuntungan karena profitabilitas usaha juga ditentukan oleh biaya produksi.

Biaya produksi CPO di Indonesia (PT. Perkebunan Negara) tahun 1991 adalah sekitar Rp 219-439/kg CPO dengan rerata Rp 253,31/kg pada tahun 1991 dan Rp 367/kg CPO tahun 1993 (1), sedangkan

Basiron (6) memperkirakan biaya produksi CPO adalah US$ 185/ton. Biaya olah di pabrik rafinasi dan fraksinasi adalah sekitar Rp 38-55/kg CPO. Oleh karena itu, biaya produksi sampai dengan rafinasi fraksinasi adalah antara Rp 257-494/kg CPO. Dengan menerapkan Persamaan 2 maka biaya produksi minyak kelapa untuk dapat tetap bersaing dengan minyak sawit adalah Rp 711,36/kg.

Berdasarkan analisis biaya di usaha perkebunan kelapa yang relatif baik (9), biaya produksi minyak kelapa adalah Rp 735,56/kg. Hal ini menunjukkan bahwa untuk kegunaan yang sama, biaya produksi minyak kelapa lebih tinggi dari biaya produksi minyak kelapa sawit dan dari tingkat harga untuk dapat bersaing dengan minyak kelapa sawit, dengan rincian biaya sebagai terlihat pada Tabel 3.

Tabel 3. Biaya produksi minyak kelapa
Table 3. Coconut oil production cost

Biaya penyusutan	Rp 14/butir
Depreciating cost	*Rp 14/fruit*
Biaya bunga Bank	Rp 28/butir
Bank interest cost	*Rp 28/fruit*
Biaya pemeliharaan TM	Rp 15/butir
Maintenance cost	*Rp 15/fruit*
Biaya umum	Rp 7/butir
General cost	*Rp 7/fruit*
Harga pokok kelapa	Rp 63/butir
Coconut capital cost	*Rp 63/fruit*
Biaya produksi kopra	Rp 13/butir
Copra production cost	*Rp 13/fruit*
Harga pokok kopra	Rp 76/butir
Copra capital cost	*Rp 76/fruit*
	Rp 385,0/kg kopra
	Rp 385.0/kg copra
Biaya pengolahan kopra	Rp 145,0/kg kopra
Copra production cost	*Rp 145.0/kg copra*
Produksi bungkil 0,37 kg @ Rp 180	
Copra meal production	
sebagai pendapatan	Rp 66,6/kg kopra
as income	*Rp 66.6/kg copra*
Biaya produksi minyak kelapa	Rp 463,4/0,63 kg minyak
Coconut oil production cost	*Rp 463.4/0.63 kg oil*
	Rp 735,56/kg minyak kelapa
	Rp 735.56/kg coconut oil

4.2. Tingkat kompetisi

Rasio harga minyak kelapa/(CPO-biaya rafinasi) pada umumnya 1,44 yang berarti bahwa di pasar domestik minyak kelapa mendapat penilaian yang cukup baik sehingga melebihi harga perimbangannya dengan CPO yang juga menunjukkan bahwa persaingan minyak kelapa dan minyak sawit di pasar domestik tidak terlalu ketat. Hal ini diduga terjadi karena masih cukup tersedia pasar tradisional atau spesifik. Kemungkinan lain, terdapat pabrik minyak makan yang secara teknis dan finansial sulit melakukan perubahan penggunaan bahan baku ke produk yang lebih murah (minyak sawit). Selain itu, pasar dunia juga mendukung kemampuan minyak kelapa untuk bertahan. Sejak tahun 1990, harga minyak nabati relatif baik sehingga harga minyak sawit dan minyak kelapa juga baik. Pada Tabel 5 juga terlihat bahwa volume minyak kelapa yang diserap relatif tetap sedangkan volume minyak kelapa sawit terus meningkat dengan mantap. Fenomena ini menunjukkan bahwa industri minyak makan baru lebih banyak menggunakan minyak sawit sebagai bahan baku.

Industri oleokimia diperkirakan dalam 10 tahun (sejak tahun 1984) meningkat sebanyak 50% (11). Secara absolut, percepatan tersebut relatif masih kecil sehingga dalam jangka panjang, minyak makan masih akan terus mendominasi pemanfaatan minyak nabati.

Kandungan utama minyak kelapa adalah asam laurat dan miristat yang banyak diperlukan dalam industri oleokimia dan mirip dengan komposisi kandungan minyak inti sawit. Bilangan penyabunan dan kandungan asam lemak jenuh yang tinggi serta aroma yang khas menjadi sifat-sifat unggul dari minyak kelapa. Minyak kelapa dan minyak inti sawit merupakan bahan baku penting dalam industri oleokimia yang

Tabel 4. Harga dan volume ekspor minyak kelapa dan minyak sawit
Table 4. Price and export volume of coconut and palm oil

Tahun *Year*	Pasar domestik *Domestic market*						Ekspor *Export*						Nilai tukar US $	Index keunggulan pasar dom. (1/2)
	Harga *Price*				Volume *Volume*		Harga (FOB) *Price*				Volume *Volume*			
	CPO	CNO	CNO-CPO	CNO/CPO (1)	CPO	CNO	CPO	CNO	CNO-CPO (2)	CNO/CPO	CPO	CNO	*Exchange rate*	*Inperiority index in domestic market (1/2)*
1987	262.77(427)*	507.08(824)*	397	1.93	845	610	256.9	326.9	70	1.23	471	118	1650	1.57
1988	289.76(501)	601.50(1040)	539	2.45	969	602	372.4	501.4	129	1.33	661	207	1729	1.84
1989	304.18(546)	577.72(1037)	489	1.90	1208	663	302.9	470.9	168	1.55	661	192	1795	1.22
1990	272.49(518)	402.42(765)	247	1.48	1466	599	237.8	284.8	47	1.19	974	194	1901	1.24
1991	287.15(572)	470.38(937)	365	1.63	1588	661	294.2	388.2	94	1.32	1268	198	1992	1.23
1992	352.57(727)	637.73(1315)	592	1.82	3168	418	340.5	523.5	183	1.52	1031	315	2062	1.19

* : harga dalam rupiah/kg
* : *price in rupiahs/kg*

bukan berasal dari minyak bumi. Oleh karena itu, di pasar dunia kedua jenis minyak tersebut bersaing sebagai bahan baku industri oleokimia. Konsumsi dan harga minyak kelapa dan minyak inti sawit dunia disajikan pada Tabel 5.

Tabel 5. Konsumsi dan harga minyak kelapa dan minyak inti sawit
Table 5. Consumption and price of coconut and oil palm kernel oil

Tahun *Year*	Minyak inti sawit *Oil palm kernel oil*		Minyak kelapa *Coconut oil*		Harga CPO *CPO price*
	Konsumsi *Consumption* (000 ton)	Harga *Price* US$	Konsumsi *Consumption* (000 ton)	Harga *Price* US$	
1988	1169	539	2967	565	436
1989	1333	472	2865	517	350
1990	1373	334	3206	337	290
1991	1442	417	3222	433	339
1992	1544	571	2896	578	394
1993	1742	437	2935	450	378
1994	1946	629	3073	608	528
1995	1957	677	3189	670	628

Sumber : Oil World (3)
Source

Di Indonesia, karena industri oleokimia relatif masih kecil dibandingkan dengan industri minyak goreng, maka persaingan kedua jenis minyak tersebut tidak terlihat.

Berdasarkan perkembangan konsumsi dunia terlihat bahwa konsumsi minyak inti sawit terus naik secara konsisten sedangkan konsumsi minyak kelapa berfluktuasi dan cenderung turun. FAO (10) memperkirakan bahwa laju pertumbuhan konsumsi minyak nabati untuk keperluan non pangan adalah 2,7%/tahun dan Nielsen memperkirakan bahwa permintaan bahan oleokimia akan mencapai lebih dari 6 juta ton pada tahun 2000. Negara sekitar Pasifik (*Pacific Rim*) pada tahun 2000 tersebut diperkirakan akan menghasilkan bahan oleokimia sebanyak 2,6 juta ton dan sebagian besar akan dihasilkan oleh Malaysia. FAO memperkirakan bahwa produksi minyak laurat akan tumbuh dengan laju sekitar 2,9%/tahun. Namun, laju pertumbuhan produksi minyak kelapa hanya sekitar 1,1% sedangkan minyak inti sawit 5,4%. Hal ini menunjukkan bahwa di pasar duniapun peningkatan konsumsi terutama akan diisi oleh minyak inti sawit. Oleh karena itu, peningkatan pasar ekspor minyak kelapa Indonesia sulit diupayakan.

Uraian di atas menunjukkan bahwa posisi minyak kelapa sangat sulit. Di sektor industri minyak goreng, minyak kelapa mendapat saingan dari minyak sawit sedangkan di sektor industri oleokimia mendapat saingan dari minyak inti sawit.

Perkembangan tersebut tampaknya cukup menyulitkan posisi minyak kelapa di persaingan lokal maupun internasional.

5. Pengaruh tekanan minyak sawit terhadap produsen kelapa

Produsen kelapa pada umumnya adalah petani yang meliputi 1.665 juta keluarga atau 3,95% dari total rumah tangga di Indonesia. Dari luas areal kelapa nasional, 3.592.743 ha atau 96,71% merupakan perkebunan rakyat dengan luas tanaman menghasilkan (TM) 2.310.629 ha dan produksi 2.514.819 ton setara kopra serta produktivitas 1.068 ton setara kopra per ha/tahun.

Tekanan persaingan minyak sawit dengan minyak kelapa terhadap ekonomi petani sebagai produsen kelapa dipengaruhi oleh sejauh mana ketergantungan sumber pendapatan petani pada kelapa. Semakin besar peran kelapa sebagai sumber pendapatan petani semakin sensitif ekonomi petani terpengaruh oleh tekanan persaingan dari minyak sawit.

5.1. Produksi kelapa dan pendapatan petani

Produk kelapa yang dihasilkan di Kabupaten Asahan-Sumut adalah kelapa cungkil (daging kelapa segar) sedangkan di Kabupaten Indragiri Hilir adalah kopra. Produktivitas tanaman umumnya masih rendah yaitu rata-rata 3.251,04 kg daging kelapa segar/ha di Asahan dan 2.302,73 kg kopra/ha/tahun (kadar air > 15%) di Indragiri Hilir.

Selain dari daging buah/kopra, produk samping seperti sabut, lidi dan arang tempurung telah dapat dimanfaatkan dan dijual oleh sebagian petani kelapa di Asahan sedangkan di Indragiri Hilir, hasil samping tersebut belum dimanfaatkan.

Rata-rata pendapatan petani kelapa di Kabupatan Asahan adalah Rp 160.849,2/kk/bl ditambah dengan Rp 45.687/kk/bl dari produk samping, sedangkan di Riau adalah Rp 313.746,6/kk/bl. Selain dari kebun kelapa, sekitar 94% petani kelapa di Asahan memiliki pendapatan dari berbagai sumber pekerjaan seperti dari berladang, buruh tani, nelayan dan tanaman sela sedangkan di Indragiri Hilir sekitar 87%.

Di Kabupaten Indragiri Hilir, sumber pendapatan di luar kelapa yang dominan adalah dari tanaman padi. Dari 46 petani contoh, 31 petani contoh atau 67% mendapatkan sumber penghasilan dari tanaman padi, di samping dari tanaman kelapa. Beberapa petani juga telah menanam tanaman pinang, kakao dan kopi sebagai tanaman tumpang sari, terutama di kecamatan Reteh. Harga pinang pada waktu penelitian sekitar Rp 700/kg, kakao Rp 1.700/kg dan kopi Rp 2.500/kg.

Dengan memperhatikan biaya produksi kelapa, maka pendapatan "bersih" petani kelapa Asahan adalah Rp 308.937,53/kk/bl dan Rp 473.742,25/kk/bl untuk petani Inhil. Pendapatan petani kelapa menurut sumbernya disajikan pada Tabel 6.

Tabel 6. Jumlah dan kontribusi sumber pendapatan petani kelapa pada lokasi penelitian

Table 6. Total and source contribution of coconut farmer's income in research area

Uraian pendapatan *Income items*	Sumatera Utara Rp/kk/bl *North Sumatra Rp/family/ month*	Riau Rp/kk/bl *Riau Rp/family/ month*
Pendapatan dari kelapa *Income from coconut*	160.849,20 *160,849.20*	313.746,6 *313,746.6*
Pendapatan luar kelapa *Income out of coconut*	148.088,33 *148,088.33*	159.995,65 *159,995.65*
Jumlah pendapatan *Total of income*	308.937,53 *308,937.53*	473.742,25 *473,742.25*
Kontribusi kelapa terhadap jumlah pendapatan *Coconut contribution on total of income*		
Menyeluruh *All*	52,06	66,223
< 15 %	15 %	7 %
25-50 %	21%	24%
50-75 %	43%	39%
> 75 %	21%	30%

Ditinjau dari kontribusi kelapa terhadap pendapatan, terlihat bahwa 64% dari petani kelapa Asahan dan 69% dari petani Indragiri Hilir mengandalkan pendapatan dari kelapa (kontribusi > 50%), dan hanya 15% di Asahan dan 7% di Inhil yang tidak mengandalkan kelapa sebagai salah satu sumber pendapatan (kontribusi <25%).

Jika dibandingkan dengan kebun kelapa sawit, maka pada harga jual Rp 150/kg TBS, produktivitas 18 ton TBS/ ha/th dan biaya produksi sekitar Rp 450.000/ha/th, pendapatan bersih/ha adalah Rp 187.500/ bulan (Rp 541.875/2,89 ha/bulan, Rp 990/5,28 ha) yang hampir tiga kali pendapatan dari kelapa dan dua kali dari total pendapatan saat ini. Oleh karena itu, tidaklah mengherankan jika kelapa sawit merupakan alternatif tanaman yang sangat diminati petani kelapa.

5.2 Pengeluaran keluarga petani

Kajian ini menunjukkan bahwa rata-rata pengeluaran keluarga petani/bulan untuk keperluan hidup adalah seperti disajikan pada Tabel 7.

Persentase pendapatan dari kelapa terhadap pengeluaran untuk pangan merupakan indikator daya dukung produksi kelapa terhadap kehidupan petani kelapa. Kajian ini menunjukkan bahwa persentase penghasilan kelapa sebagian besar (76%) petani kelapa Terhadap pengeluaran untuk pangan adalah >75%, sedangkan di Indragiri Hilir hanya 39% petani yang persentase penghasilannya dari kelapa terhadap pengeluaran untuk pangan >75%. Hanya sebagian kecil petani yaitu 3% di Asahan dan 7% di Indragiri yang persentase pendapatannya terhadap pengeluaran untuk pangan <25%. Persentase pendapatan petani contoh dari kelapa terhadap pengeluaran untuk pangan disajikan pada Tabel 8.

Tabel 7. Jumlah dan distribusi pengeluaran petani kelapa (Rp/kk/bulan)
Table 7. Total and expense distribution of coconut farmers (rp/family/month)

Propinsi *Province*	Pengeluaran petani *Farmers' expense*					Jumlah pengeluaran *Total Expense*
	Untuk pangan *Food*	Untuk sandang *Cloth*	Untuk pendidikan *Education*	Untuk kesehatan *Health*	Untuk Lain-lain *Others*	
Sumatera Utara *North Sumatra*	113,575	8,831	58,025	9,750	41,730	190,032
Riau *Riau*	168,464	11,108	11,663	1,575	52,571	234,234

Tabel 8. Persentase pendapatan petani contoh dari kelapa terhadap pengeluaran untuk pangan
Table 8. Percentage of sample farmers' income from coconut to expense for food

% penghasilan kelapa thd. pengeluaran untuk pangan *Percentage of coconut income to expense for food*	Sumatera Utara *North Sumatra*	Riau *Riau*
	%	%
< 25%	3	7
25 - < 50%	12	24
50 - 75%	9	30
> 75%	76	39
Total	100	100

Data pengeluaran per kapita keluarga petani menunjukkan bahwa sekitar 23% memiliki pengeluaran/kapita kurang dari Rp 25.000/bulan dan sekitar 71% dari keluarga petani responden memiliki pengeluaran per kapita kurang dari Rp 50.000/bulan (Tabel 9).

Tabel 9. Pengeluaran/kapita/bulan keluarga petani contoh di Kabupaten Asahan dan Indragiri Hilir
Table 9. Expense/capita/month of sample farmer in Asahan and Indragiri Hilir

Pengeluaran/kapita/bulan (Rp) *Expense/capita/month (Rp)*	Sumatera Utara *North Sumatra*	Riau *Riau*	Keseluruhan contoh *All sample*
	%	%	%
0 - < 25.000	36.4	13.0	22.8
25.000 - 50.000	48.5	47.8	48.1
50.000 - 75.000	3.3	19.6	15.2
> 75.000	6.1	19.6	13.9
Total	100	100	100

Berdasarkan nilai UMR diperkirakan bahwa kebutuhan fisik minimum/kapita untuk Sumut adalah Rp 25.000/kapita/bulan sedangkan untuk Riau adalah Rp 28.000/ kapita/bulan. Oleh karena itu, petani dengan pengeluaran kurang dari Rp 25.000/bulan hidup di bawah standar minimum. Karena kebun kelapa tidak mampu memperbaiki hidup mereka dan mereka tidak mampu untuk mengkonversi ke tanaman lain, maka mereka sangat mungkin untuk mengalihkan pemilikan lahannya ke orang lain yang lebih mampu. Jumlah keluarga demikian mencakup sekitar 36,4% dari keluarga petani di Asahan dan 13,3% di Indragiri Hilir.

Kelompok keluarga dengan pengeluaran lebih dari Rp 50.000/kapita/bl merupakan kelompok yang mampu memenuhi kebutuhan di atas kebutuhan fisik minimum sehingga secara finansial lebih mempunyai kesempatan untuk memanfaatkan relief ekonomi lain atau melakukan pemeliharaan yang lebih intensif atau konversi ke tanaman lain jika diperlukan dibandingkan dengan kelompok keluarga yang lebih miskin. Keluarga petani seperti ini sekitar 15% di Asahan dan 37,7% di Inhil.

Kelompok keluarga yang hanya mampu mengeluarkan Rp 25.000-50.000/kapita/bl merupakan kelompok menengah yang mampu hidup di atas batas minimum tetapi diduga tidak mampu untuk menciptakan menangkap relief ekonomi lain atau melakukan rehabilitasi atau mengkonversi tanamannya kepada tanaman yang lebih ekonomis. Kelompok ini sekitar 48,5% petani di Asahan dan 47,8% di Indragiri Hilir.

KESIMPULAN

Umumnya di pasar domestik minyak kelapa dan minyak sawit bermuara pada pasar yang sama yaitu pasar bahan baku minyak goreng. Harga pokok minyak kelapa lebih tinggi dari harga pokok olein, sehingga perkembangan permintaan terhadap minyak makan lebih banyak dipenuhi dari minyak sawit.

Persaingan minyak kelapa dan minyak sawit di pasar domestik lebih lunak dibanding persaingan di pasar ekspor. Akan tetapi keunggulan minyak kelapa pada pasar domestik terus berkurang.

Minyak kelapa masih dapat bertahan karena perkembangan harga ekspor minyak nabati yang relatif baik dan adanya dukungan pasar tradisional domestik, meskipun dengan margin keuntungan yang semakin kecil.

Bila produktivitas kelapa tidak mengalami peningkatan secara berarti dan produk olahan tetap terfokus pada minyak, pengusahaan kelapa sawit jauh lebih menguntungkan dari kelapa dan perkebunan kelapa akan semakin lemah dalam persaingan dengan kelapa sawit.

Data dari petani sampel menunjukkan bahwa 64% petani kelapa Asahan dan 69% petani Indragiri Hilir mengandalkan pendapatan dari kelapa (kontribusi 50%). Oleh karena itu, pendapatan sebagian besar petani kelapa ditentukan oleh nilai ekonomi produk kelapa petani.

Untuk meningkatkan daya saing kelapa perlu diversifikasi produk dengan memanfaatkan sifat yang spesifik dari produk kelapa, disamping upaya peningkatan produktivitas tanaman dan produktivitas lahan melalui tumpangsari dengan tanaman yang sesuai.

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Marketing interaction between coconut and palm oil

Z. Poeloengan, Sjukri Hamid, Lalang Buana, and Daswir

Abstract

The result showed that competitiveness of coconut oil was weaker that of palm oil. The competition of palm oil influences more to the farmer who relies his income on coconut, i.e. 85% in Asahan and 65% in Indragiri Hilir. Diversification of coconut product by using specific product which has comparative superiority beside the effort of increasing the productivity and the area with suitable intercropping was needed to increase coconut competition upon oil palm.

Key words : *Elaeis guineensis*, *Cocos nucifera*, marketing

Introduction

Indonesia is the second largest producers of oil palm and coconut in the world. The chemical composition of coconut actually differs from palm oil, therefore it has different specific use but similar to palm kernel oil. The content of coconut oil is dominant more in lauric acid, while in palm oil more in oleic acid and palmitic.

In domestic market, up to middle decade of 1970-ies the main resource of oil/vegetable fat, especially material for frying oil industry was from coconut and oil palm product was for export market. Nevertheless, the gap between the flow of consumption growth and coconut production wider so coconut product could not cover domestic market. At the period between 1969-1971 to 1980-1982, jump in consumption occurred twice, i.e. from 3.8 kg/capita/yr to 7.8 kg/capita/year (2). While at thesame time the flow of coconut growth consumption only rose 2.5% per year (4).

In order to fulfill domestic market the government carried out substitution wisdom

of palm oil to fill the deficit in coconut production. The total and allocation price were managed through the decision of three ministers in 1978. From that time oil palm and coconut had the same share at domestic market.

Both commodities are important to Indonesia, as a producer, an industry, a source of state income, or the large community as a consumer. Considering that coconut productivity is low whereas palm oil production is high, therefore, the interest in oil palm is higher.

On the other hand, smallholder coconut is a crop which does not need special treatment so it allows the coconut farmer to earn income through other activity. Therefore, the survival of coconut plantantion was strongly dependent on coconut contribution to coconut farmer's income. The bigger the dependency the bigger the desire of the farmer to increase the productivity of his land.

This paper describes the interaction and the coconut market strength versus the palm oil market.

Materials and Methods

The data were obtained from various sources, especially from the Center of Statistical Bureau, Directorate General of Estates and Joint Marketing Office. The analyses were regressing analysis, description of coconut oil and palm oil economic development and cost analysis.

To find the effect of competition between palm oil and coconut oil to coconut producers and coconut farmer's obstinacy to competition pressure of palm oil commodity, the survey was performed in coconut production centre in North Sumatra and Riau. Both regions were the centre of coconut and palm oil production, so the competition was tougher than the region that is only the coconut production centre. Two regencies from each province were selected as a centre of coconut production. From each regency a subdistrict was selected as the main coconut producer, then from each subdistrict some villages with 10-20 responded farmers were selected.

The data collected consisted of secondary data from Dinas Perkebunan Tkt. II and primary data collected directly from farmers. Yield area, production and total of coconut farmers family were collected from Dinas Perkebunan, while data of area ownership, technical culture, production income from coconut and other income and supporting data were collected from farmers.

Farmer's obstinacy as coconut producer was based on coconut contribution to his income. The bigger the coconut contribution to farmer's income, the more senstitive palm oil pressure influence to the obstinacy of coconut farmers.

Results and Discussion

1. Area development and production

Oil palm production development was very fast with the average growth flow at the average of 14.64%/year. On the contrary the coconut growth flow production was slow, at the average of only 3.64%/year in the last ten years.

Other development projects, like PIR-SUS, SCDP, PRPTE, P2DT and P2WK were managed to enhance the growth of coconut production. Nevertheless, the productivity of coconut plantation was still low, i.e. at the average of 1 ton like copra/ha (4), while at oil palm was at the average of 3 ton/ha crude palm oil not included kernel oil.

2. Utilization

In line with population growth and increase of income, national consumption of frying oil increased steadily from 768,400 ton in 1980 to arround 1.23 million ton/year or arround 0.23 kg/capita/year.

Simple regression analysis showed that consumption variation in coconut oil and palm oil could be determined as shown in Equation 1. It showed that consumption of local frying oil became a limitating factor of the two oils and the use of coconut oil and palm oil for other purposes was not very significant.

$Y = 357.96 + 0.4834\ MS + 0.4281\ MK$ ... 1

$R = 0.98$

Y = National frying oil consumption
MS = palm oil
MK = coconut oil

Palm oil as frying oil was more dominant in Indonesian community and closely same as coconut oil. If in 1969-1971, composition of manufactured coconut oil reach 91.7%, but in 1982 the composition declined to 59.67% and from palm oil 50.3% (2). The role of coconut frying oil declined continuously. Eventhough coconut frying oil production increased, but the increase was lower than the production of palm oil frying oil. The total production of coconut oil and palm oil in 1989-1993 showed that the role of palm oil increased or coconut oil decreased 11.05%, so in 1993 coconut oil role was only 28.94% from the total role of coconut oil and palm oil (4).

3. Price

The price of coconut frying oil in the export market was 14% higher than CPO frying oil, while in domestic market the price of coconut frying oil was 17% higher (1984-1993). Therefore, the surplus was due to more appreciation given to coconut oil.

The development of frying oil price based on its raw materials in domestic and export price is shown in Table 2.

4. Competition

4.1. Comparison of main price

Olein is a fraction which is equal to coconut oil as a basic material in frying oil industry. In CPO rafination and fractination, the rendement of olein is arround 73%, stearin 23% and fatty acid 3%. Based on domestic price at 1985-1992, the comparison of olein price, stearin and fatty acid was 42.4:32.9:24.7 respectively. Therefore, the product value of CPO processing was equal to 81.03% olein. Then, coconut oil production cost for competing with palm oil could be analysed as follows :

$$ComCost\_CNO = 1.17 * (Cost\_olein)$$
$$= 1.17 * (Cost\_CPO + Cost\_rf)/0{,}8103$$
$$= 1.44 * (Cost\_CPO + Cost\_rf) \quad \ldots\ldots 2$$

ComCost_CNO = competitive frying oil prodcution cost
Cost_olein = olein production cost
Cost_CPO = CPO production cost/kg
Cost_rf = CPO production cost/kg in rafination and fractionation industry

If the formed price was above competitive price, it showed that coconut oil was in the better position compared to palm oil in trade or on the contrary. Nevertheles, it is not always parallel to the effort tocreate profit because the profitability is also determined by production cost.

The production cost of CPO in Indonesia was arround Rp 350-400/kg CPO, whereas Basiron (3) calculated that CPO production cost up to rafination fractination was arround Rp 388-455/kg CPO. By ap-

plying Equation 2 the coconut oil production cost Rp 655/kg could still compete with palm oil.

Based on cost analysis in relatively good plantation (6), the cost production of coconut oil was Rp 735.56/kg. It indicates that for the same purpose and from the price can compete with palm oil, production cost of coconut oil is higher than palm oil. The details of cost are shown in Table 3.

4.2. Competition rate

Coconut oil price ratio/(CPO-rafination cost) is generally 1.44 which means that in domestic market coconut oil receive quite good evaluation up to is comparative price to CPO. It also indicates that competition between coconut oil and palm oil in domestic market is not very tight, presumably because traditional or specific market still exists. It is also possible that conservative frying oil manufactory which is technically difficut to switch to cheaper raw material still exists. Besides, world market also supports the ability of coconut oil to survive. Since 1990, the price of vegetable oil was relatively good so the price of palm oil and coconut oil. Table 4 shows that the volume of consumed coconut oil was stable while the volume of palm oil increased steadily. This phenomenon shows that new food oil industry uses more palm oil as te raw material.

Oleochemical industry was estimated to increase 50% in 10 years (since 1984) (11). Absolutely, this development was relatively small, so in the future food oil still dominated the use of vegetable oil.

The main content of coconut oil is lauric acid and miristic which are needed by oleochemical industry and they are similar to kernel oil in composition. Soap numbers, high saturated fatty acid with special aroma are the coconut oil characteristic superiority. Coconut oil and kernel oil were the important non-petroleum material in oleochemical industry. Therefore, in the world market the two kinds of oil compete to be the oleochemical industrial raw material. Consumption and price of coconut oil and kernel oil were provided in Table 5.

In Indonesia oleochemical industry was still relatively smaller than frying oil industry, so the competition of the two oils is not obvious.

Based on world consumption development kernel oil consumption rises consistently while coconut oil consumption fluctuats and tends to decline. FAO (10) estimated that non-food vegetable oil consumption was 2.7%/year and Nielsen estimated that oleochemical material demand would reach more than 6 million ton in the year 2000. The state arround Pacific (Pacific rim) in the year 2000 it is estimated to produce 2.6 million ton oleochemical and the biggest part would be produced by Malaysia. FAO estimated that lauric oil production would grow arround 2.9%/year. Nevertheless, coconut oil production was only 1.1% while kernel oil was 5.4%. Thus, that in the world market the rising of consumption especially would be filled by kernel oil. Therefore, the rising of Indonesian coconut oil market was difficult to attempt.

From the above description it was clearly seen that the position of coconut oil was difficult. In frying oil industry, coconut oil competes with kernel oil.

Those development strongly make the position of coconut oil difficult either in the local or international.

5. The effect of palm oil pressure to coconut producer

Coconut producers are generally farmers who cover 1,665 million families or

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Those development strongly make the position of coconut oil difficult either in the local or international.

5. The effect of palm oil pressure to coconut producer

Coconut producers are generally farmers who cover 1,665 million families or

3.95% from the total household in Indonesia. But of national coconut hectarage, 3,592,743 ha or 96.71% belong to smallholders with total producing area of 2,310,629 ha, producing 2,514,819 kg coconut equivalent to 1,068 ton copra/ha/year.

Competition pressure from palm oil upon the economics of coconut farmers was influenced by how far the dependence of farmers income source to coconut. The bigger the role of coconut as the source of farmers income, the more sensitive economic influence by the competitive on pressure of palm oil.

5.1. Coconut production and farmer's income

Coconut product in Asahan regency, North Sumatra was coconut meat (fresh coconut meat) while in Indragiri Hilir regency was copra. Generally the productivity was still low i.e. at the average of 3,251.04 kg/fresh coconut meat/ha in Asahan and 2,302.73 kg/capita ha/year (water contents 15% in Indragiri Hilir.

Beside fruit meat copra, other products like fiber, palm leaf rib and charcoal of coconut shell have been used and sold by some coconut farmers in Asahan but not in Indrgiri Hilir.

The average coconut farmer's income in Asahan regency was Rp. 160.849,1/family/month beside Rp. 45.687/family/month obtained from other sources, while in Riau Rp. 313.746,6/family/month. Beside from coconut plantation, arround 94% coconut farmer in Asahan had their income from other works like to farm, being paid farmer, being fisherman and intercropping while in Indragiri Hilir arround 87%.

In Indragiri Hilir regency, the income source of farmers beside coconut mainly from rice. From 46 sample farmers, 31 sample farmers or ± 67% got the income from rice beside coconut. Some farmers had planted areca palm, cacao and coffee as intercropping crop, especially in subdistrict head, Reteh. At the time of research the price of areca palm was arround Rp 700/kg, cacao Rp 1,700/kg and coffee Rp 2,500/kg.

Concerned with coconut production, so the net income of Asahan coconut farmer was Rp 295,441.6/family/month and Rp 570,902.1/family/month for Inhil farmer. The income of coconut farmer according to the sources is described in Table 6.

Based on coconut contribution to the income, 85% from Asahan coconut farmers and 69% from Indragiri Hilir farmer depended their income on coconut (contribution >50%), and only 15% in Asahan and 7% in Inhil who were not depended on coconut as one of the sources of income (contribution < 25%).

Comparing to oil palm plantation with the selling price Rp 150/kg FFB, productivity of 18 to FFB/ha/year and production cost arround Rp 450,000/ha/year, net income/ha was Rp 187,500, Rp 541,875/2.89 ha, Rp 990,000/5.28 ha) which was nearly three times the income from coconut and two times from the total present income. Therefore, it was not a surprise if palm oil was the alternative favourite plant for coconut farmer.

5.2 *Farmer's expenses*

The average expence of farmer's family/month for daily need is shown in Table 7.

The income percentage from coconut over the expense for food was an indicator of the ability of coconut production to support coconut farmer's life. This study showed that in Asahan, bigger part (76%) of family's income could cover the biggest part (75%) for food necessities from coco-

nut products while in Inhil only 39% of the income used to support > 75% of food need. while the proportion of income from coconut could only support small part (in Asahan 3% and Indragiri 7%) of the percentage income used to support > 25% of food need. Percentage of sample farmers' income from coconut to expense for food is presented in Table 8.

The expense data per capita of farmer family showed that arround 23% had expense/capita less than Rp 25,000/month and arround 71% from responding farmer family had the expense per capita less than Rp 50,000/month (Table 9).

Based on the value of Regional Wage Minimum it is estimated that the necessity of minimum physical need/capita for North Sumatra is Rp 25,000/capita/month while for Riau Rp 28,000/capita/month. Therefore, farmers with the expense of less than Rp 25,000/month live below minimum standard. Because income from coconut farm could not improve their living and they could not shift to other crops, so they were likely to transfer the ownership their own farm to other capable man. That kind of family consists of arround 36.4% of farmer's family in Asahan and 13.3% in Inhil.

Group of family with living expense of more than Rp 50,000/capita/month was the group which could afford the need above minimum need so financialy it had the chance to take advantage of other economic relief or doing a more intensive or maintenance shifting to other crop if necessary compared to the poorer. This kind of family was arround 15% in Asahan and 37.7% in Inhil.

The group of family with living the expense of Rp 25,000 - 50,000/capita/month was middle group which lived above minimum need but it was believed that they could not create or catch other economic relief or did rehabilitation or shift to a more economical crop. The group was found 48.5% in Asahan and 47.8% in Indragiri Hilir.

Conclusions

In domestic market, coconut oil and palm oil originated from the same market, i.e. frying oil raw material market. Basic price for coconut oil was higher than that of olein, so demand development for food oil were filled more by palm oil.

The competition between coconut oil and palm oil in domestic market was softener in domestic market than in export market. But superiority of coconut oil in domestic market continually declined.

Coconut oil still survived because development of vegetable oil export price was still relatively good and there was a support from traditional domestic market, although with declining benefit margin.

If the coconut productivity did not increse significantly and processing product still focused on oil, palm oil business was more profitable that coconut and coconut farms became weaker in competition with palm oil.

The data from sample farmers showed that 85% of Asahan coconut farmers and 65% in Indagiri Hilir relied on coconut (contribution 50%) as the main source of income. Therefore, income of the bigger part of farmers was determined by the economic value of coconut products.

To increase coconut competitive power, product diversivication utilizing specific characteristics of coconut product was needed, beside the effort of increasing plant productivity and the land productivity through intercropping with proper crop.

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